

Green Museum Best Practices Resource Guide

The Green Museum Initiative is here to guide and support your institution on the road to sustainability. Please join our online community, as we share our obstacles, insights, ideas, and successes, and sign on to the Green Museum Accord, committing to meet the needs of the present, conserve the assets of the past, and preserve our resources for the future.

Because the underlying driver of human impact on the environment is our over-consumption of resources, we can reduce our impact by not only consuming less, but also by consciously transitioning from a linear path of material extraction, use, and disposal to a circular flow that reuses materials, like nature does. Museums can play a leadership role in this transition by modeling ways to tread more lightly on the land: being mindful of our consumption of food, energy, materials, water, and by being good stewards of the our environment.

Education is also indispensable to achieving sustainable development, and museums are uniquely situated to take a lead role here. The United Nations has declared this the Decade of Education for Sustainable Development, "challenging us all to adopt new behaviors and practices to secure our future."

This resource guide suggests some Best Practices that your museum can implement. We focus on the use of sustainable, recyclable biomaterials, harvested from renewable sources. "Reduce, reuse and recycle" is our mantra, and we encourage museums to use their purchasing power for effective dollar-diplomacy.

Green Museums require cross-pollination between museum programs, services, operations, and facilities. You can help bring this about by striving to bring vision, leadership, education, and collaboration to all your practices, across all departments. Transform your institution's consumption habits at every level with these basic steps:

- Encourage everyone to 'Think Green.'
- Dare to have a vision.

- Believe you can make a difference. This belief is contagious, powerful, and brings meaning and purpose to your staff.
- Reduce, reuse, recycle and promote this ethos among all stakeholders.
- Be a leader. Be an example.
- Work daily to implement your green vision in all you do.
- Share your knowledge and successes with colleagues, the press, and most importantly, your community.
- Collaborate. Reach out to others to create innovative green practices.
- Make the green commitment. Sign on to the Green Museum Accord.

Administration

Much of the practical “greening of museums” goes on behind the scenes through sustainable business practices, purchasing policies, and facilities management. This is where our green values are developed, adopted, and maintained. Administrative staff, leadership, and governance teams must work together to support the overall goal of creating an environmentally friendly institution.

Embracing green values means that every decision is made with the environment in mind. We must rethink our business practices: how we do things, what we do, and with whom we do them. This means developing buying and vendor policies that insure our purchased products and services are sustainable, and seeking support from funders and sponsors who share our green commitments. We want to make sure that we are not only wise consumers, but that we vote with our investment dollars to support socially and environmentally responsible values.

Administrative staff can look at several areas of the museum’s operation – purchasing, marketing, financing – and ask these fundamental questions: do our vendors share our green values? What is our resource footprint? Can we reduce, repurpose, or recycle what we use?

The support of the administrative staff is key. We can take the lead in educating the board and staff about sustainability, and spread the word among our colleagues about our challenges, solutions, and best practices. By demanding green values from our vendors and supporters, we can influence the larger community, while sharing our green message with stakeholders and visitors.

- Look at your vendor lists. Do your vendors share your green values?
- Look in the supply closets. What is necessary? Are there green alternatives?
- Draft a Green Vendor Policy with criteria for vendors and products.
- Look at your printed materials. Can they be on recycled paper or use vegetable-based ink? Can they be disseminated electronically?
- Look at your banking and investment portfolio. Does your institutional money support green values?
- Look at your list of donors. Do they share your commitment to the environment?
- Are you creating awareness of your green achievements among your visitors and other stakeholders?

Buildings and Operations

The U.S. Green Building Council (USGBC) states that buildings account for 38 percent of all carbon dioxide emissions and 72 percent of electricity consumption. By building and operating sustainably, museums can significantly reduce these numbers and improve the quality of life for employees, visitors, and the surrounding community. Going green also lowers operating expenses, increasing the value of your facility and allowing more resources to go into your core mission.

If a new building or remodel is in your museum's future, you can achieve

sustainability with the USGBC's Leadership in Energy and Environmental Design® (LEED) Green Building Rating System,™ widely acknowledged as the benchmark for sustainable design and architecture. This system effectively incentivizes builders to use sustainable architectural and design strategies:

- Start a recycling program.
- Use recycled paper products.
- Reduce electrical energy consumption. Use dimmers, sensors and controls for lighting. Install energy efficient lighting and HVAC systems.
- Use non-toxic cleaning supplies.
- Commission an independent analysis of operations to create a baseline for resource use.
- Landscape with native, drought-tolerant vegetation.
- Install water conserving bathroom fixtures.
- Use reclaimed water where applicable.
- Use sustainable or recycled facility furnishings and construction materials.

The stringent climate and humidity requirements for museum collections are energy-intensive, with a carbon-heavy fossil fuel footprint. It is therefore imperative to reduce electrical demand while maintaining a safe, consistent climate. Localized climate control monitoring and reusable microclimate exhibition casework can help meet these needs more efficiently. Storage areas are great places to use energy efficient lighting, green construction materials, and natural methods of contaminant and dust extraction. When creating new storage areas, consider using additional insulation in the structure to reduce the need for heating and cooling.

Contemporary conservation practice honors what environmentalists call the “precautionary principle,” using the least amount and safest alternatives when making choices. Instead of asking, “how much harm will be allowed?” ask, “How little harm is possible?” For art and historical collections, use reversible treatments, toxic-free storage supplies, cleaners, adhesives, paints and sealants. To rid objects of pests, use freezing and oxygen starving nitrogen processes rather than chemicals.

For botanical and zoological collections, use natural environments and enclosures, organic feeds, chemical-free environments, and non-toxic pesticides.

Shipping collections from one venue to another takes a toll on objects and the environment. Reduce the need for transportation by ganging and sharing shipments with other museums. Crate collections using Forest Stewardship Council (FSC) certified lumber, recycled and toxin-free particleboards, ether foam and packing materials. Reuse crates and containers or share them with other museums, and negotiate less restrictive climate control requirements on loan agreements for more robust objects.

Collaborate with museum shipping and packing companies that commit to reducing their carbon footprint. Order supplies and materials from vendors who stock and support recycled and non-toxic products.

Education

As educators, we must consider carefully what we want people to learn and do in our museums. How can their experience with us inspire, illuminate, and encourage enlightened environmental stewardship? We need to examine both content and process. Some of this content is obvious, arising from our missions (wildlife awareness at a zoo, for instance), while other content requires creativity and new ways of thinking. By weaving green topics into what we present and green strategies into what we do, all institutions can raise awareness and increase community involvement in sustainability.

Infusing education department goals and values with a green vision is one way to start. What do we believe as a staff? What is inherently green about what we do? Can all our programs include green themes and strategies? What resources do our programs use? Can they be reused, repurposed, or reimaged? How can we reduce the resource footprint of our programs?

Through well-crafted programs and leading by example, educators can play a major role in greening the museum, and, by extension, the community:

- Develop a green values statement to guide content and process for your department.
- Keep an inventory of education supplies. Can you get donated items? What can be reused or repurposed?
- Make a list of environmental organizations and experts in your community. Call on them to participate in family days or partner on new initiatives. Brainstorm with them – you'll come up with some amazing projects by working together.
- Understand your bioregion. What native plants and animals do or did exist there? What have been the land use patterns over time? Trace the seasons. Know your watershed. This knowledge will help you develop new programs and be aware of the natural rhythms in your community.
- Consider an on-site art project where visitors can be creative within a minimal eco-footprint.
- Talk to your visitors about their environmental concerns.

Exhibits

Exhibits provide inspiration and education for a broad spectrum of visitors from all walks of life, but developing and installing exhibitions requires large quantities of construction materials, electrical energy, and transportation.

You can reduce this footprint by constructing exhibit components (walls, display cases, furnishings) from recycled or rapidly renewable materials, and sharing and coordinating with other museums, local non-profits, or city-run programs.

The chemicals used in our exhibit paints, glues, and graphics materials may pose environmental health concerns for staff and visitors. Even when fully installed, these products can continue releasing toxins into our closed indoor environments. Consider using alternative green products for your exhibitions wherever possible, including non-toxic paints and products, and recycled or rapidly renewable sources for exhibition construction. We should aim to create robust, flexible, modular exhibit display systems, designed to be repurposed and reconfigured repeatedly.

Many of our collections require twenty-four hour climate control and complex lighting systems. These generally draw electricity from carbon-burning power plants, the primary cause of global warming. Museums should strive to implement energy-efficient climate and lighting systems for exhibition spaces, localize control over exhibition areas using dimmers and sensors, and obtain electricity from renewable energy sources.

- Specify green products and materials.
- Print on recycled paper or reused materials using low solvent inks.
- Create a less toxic environment. Use low VOC paints.
- Use screws instead of toxic glues, to allow for disassembly and reuse.
- Share left over materials, furniture, shipping crates with other museums.
- Reuse or recycle exhibit components through local non-profit or city-run programs.
- Inform visitors of your green initiatives through exhibition signage.
- Aim for a zero-waste, energy-neutral exhibition environment.

Join Us!

Our mission to attract and inspire the audiences of today while protecting our cultural and natural heritage for the visitors of the future, makes our museums a natural platform and springboard for the transformation toward a sustainable future. By leveraging our knowledge, inspiration, and place in the community, museums of all sizes and disciplines have the opportunity to make an enormous impact.

The GMI is here to offer practical ideas to help. We hope our online community will provide a dynamic forum for you to share your green operations and programs, communicate inspiration and techniques, and discover what others are doing to green their museums. Last, we invite all our California museums, big and small, to sign on to the Green Museum Accord and signal your commitment to a sustainable future.